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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/542,274	04/04/2000	James J. Crow	044577.0005	5237

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EXAMINER

NGUYEN BA, HOANG VU A

ART UNIT	PAPER NUMBER
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2122

8

DATE MAILED: 07/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/542,274

Applicant(s)

CROW ET AL.

Examiner

Hoang-Vu A Nguyen-Ba

Art Unit

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to the amendment filed May 16, 2003.
2. Per Applicants' request, claims 1, 10, 14 and 19 have been amended. Claims 1-23 remain pending.
3. In view of Applicants' amendments to the Specification and to claims 1, 10, 14 and 19 to correct the identified informalities, the objection to the specification and claims is hereby withdrawn.

Response to Arguments

4. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 10 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,256,772 to Apte et al.

Claim 10

Apte et al. discloses at least:

a plurality of plugin modules, including at least a first plugin module comprised of an introspection interface portion, an installation program component and a program behavior portion (see at least Figure 2, item 210 and related discussion in the specification); and
a harness for evaluating the introspection interface portion of the first plugin module to determine if any resources are required for use of the program behavior portion of the first plugin module (see at least Figure 2, item 212; Figures 3A, 3B, item 302; and related discussion in the specification).

Claim 14

The rejection of claim 10 is incorporated. Apte et al. al. further discloses:

a loader component for loading a plugin module comprised of an introspection interface portion and a program behavior portion (see at least Figure 3A, item 302, e.g., “getObject(name)” and related discussion in the specification);
a validator component for interfacing with the introspection interface portion to identify any resources required by the plugin module (see at least 5:46-50); and
a finder component for surveying the computer system for any resources identified by the validator component (see at least 2:24-28; 3:4-7).

Claim Rejections – 35 U.S.C. § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-3, 5, 7-9, 15 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,256,772 to Apte et al in view of U.S. Patent No. 6,490,722 to Barton et al.

Claim 1

Apte et al. discloses at least:

a functional component for providing a predetermined programming functionality (see at least Figure 2, items 208, 210 and related discussion in the specification); *and*
a preprocessing interface component for providing introspective information about any requirements of the functional component in response to a request from the host computer (see at least Figure 2, item 212; Figures 3A, 3B, item 302; and related discussion in the specification).

Apte does not specifically disclose *an installation component that manages installation of the functional components*. However, Barton teaches a software installation system that manages installation of functional components (2:31- 3:52). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Barton with Apte because the addition of Barton to Apte would increase the flexibility of the scripting environment of Apte.

Claim 2

The rejection of claim 1 is incorporated. Apte et al. further discloses that the preprocessing interface further comprises *a command sequence that identifies the functional component* (see at least Figures 3A, 3B, item 302 and related discussion in the specification).

Claim 3

The rejection of claim 1 is incorporated. Apte et al. further discloses that the preprocessing interface further comprises *executable object code that identifies the functional component* (see at least Figures 3A, 3B, item 302 and related discussion in the specification).

Claim 5

The rejection of claim 1 is incorporated. Apte et al. further discloses discloses that *the request from the host computer occurs when the module is required by a second module stored at the host computer* (see at least Figure 3A, item 302 and related discussion in the specification).

Claim 7

The rejection of claim 1 is incorporated. Apte et al. further discloses that *the introspective information provided by the preprocessing interface component comprises identification of an external module required by the functional component* (see at least 4:58-63).

Claim 8

The rejection of claim 1 is incorporated. Apte et al. further discloses that *the introspective information provided by the preprocessing interface component comprises identification of the type of functional component* (see at least Figure 3A, item 302, e.g., “queryRegisteredComponents()”; item 308; and related discussion in the specification).

Claim 9

The rejection of claim 1 is incorporated. Apte et al. further discloses that *the introspective information provided by the preprocessing interface component comprises identification of at least a first resource at the host computer that will be modified by the functional component* (see at least Figure 2, item 302, e.g., “getObject(name)”; and related discussion in the specification).

Claim 15

The rejection of claim 10 is incorporated. Claim 15 recites the same feature in claim 2; therefore, the same rejection is applied.

Claim Rejections – 35 USC § 103

9. The following is a quotation of the 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,256,772 B1 to Apte et al., as applied to the base claim in view of U.S. Patent No. 6,298,353 B1 to Apte.

Claim 6

Apte et al. does not specifically disclose that *the introspective information provided by the preprocessing interface component comprises version information for the module*. However, Apte

teaches checking serialization compatibility between versions of Java classes (see at least 6:17-29). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use this feature in Apte et al. because this would increase the flexibility of Apte et al.'s scripting environment component.

Claim 13

Claim 13 contains features similar to those in claims 5 and 6. As a result, this claim is rejected for the same reasons.

11. Claims 4, 11, 12, 16, 17, 18, 19, 20-21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,256,772 B1 to Apte et al., as applied to the base claim in view of U.S. Patent No. 6,330,006 B1 to Goodman.

Claim 4

Apte et al. does not specifically disclose that *the request from the host computer occurs as part of an installation of the module in the host computer*. However, Goodman teaches a network system (see at least Figure 1) of local server computer (host or item 123) and local computer 100 which can send and receive program code to and from the remote server 126 through the local network 122, ISP 124, Internet 125. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the scripting technique in component software architecture of Apte et al. in combination with the network system of Goodman because this would increase the flexibility of the scripting environment of Apte et al.

Claim 11

The rejection of claim 10 is incorporated. Apte et al. does not specifically disclose that *a second computer connected to the first computer, where the second computer includes a first resource required by the first plugin module that is transferred to the first computer upon request by the plugin installation program component*. However, Goodisman teaches a network system (see at least Figure 1) of local server computer (host or item 123) and local computer 100 which can send and receive program code to and from the remote server 126 through the local network 122, ISP 124, Internet 125. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the scripting technique in component software architecture of Apte et al. in combination with the network system of Goodisman because this would increase the flexibility of the scripting environment of Apte et al.

Claim 12

The rejection of claim 10 is incorporated. Apte et al. does not specifically disclose *a second computer connected to the first computer, where the second computer includes a first resource required by the first plugin module that is transferred to the first computer upon request by the harness*. However, Goodisman teaches a network system (see at least Figure 1) of local server computer (host or item 123) and local computer 100 which can send and receive program code to and from the remote server 126 through the local network 122, ISP 124, Internet 125. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the scripting technique in component software architecture of Apte et al. in combination with the network system of Goodisman because this would increase the flexibility of the scripting environment of Apte et al.

Claim 16

The rejection of claim 10 is incorporated. Claim 16 recites the same feature in claim 4; therefore, the same rejection is applied.

Claim 17

The rejection of claim 10 is incorporated. Apte et al. discloses *a plugin module* (see discussion in claim 10). Apte et al. that *the computer system is a client/server system*. However, Goodman teaches a network system (see at least Figure 1) of local server computer (host or item 123) and local computer 100 which can send and receive program code to and from the remote server 126 through the local network 122, ISP 124, Internet 125. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the scripting technique in component software architecture of Apte et al. in combination with the network system of Goodman because this would increase the flexibility of the scripting environment of Apte et al.

Claim 18

The rejection of claim 10 is incorporated. Apte et al. discloses *a plugin module* (see discussion in claim 10). Apte et al. that *the computer system is a client/server system*. However, Goodman teaches a network system (see at least Figure 1) of local server computer (host or item 123) and local computer 100 which can send and receive program code to and from the remote server 126 through the local network 122, ISP 124, Internet 125. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the scripting technique in component software architecture of Apte et al. in combination with the network system of Goodman because this would increase the flexibility of the scripting environment of Apte et al.

Claim 19

Apte et al. discloses at least: *querying the interface portion of the first software module to identify any resources required by the program module* (see at least Figure 2, item 212; Figures 3A, 3B, item 302; and related discussion in the specification). Apte et al. does not specifically disclose the other two features of the claim.

However, Goodisman discloses *receiving a first software module and installing the first software module if all resources required by the program portion are available* (see at least 4:41-67).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Apte et al. with Goodisman because this combination would increase the flexibility of the Apte et al.'s scripting environment.

Claim 20

The rejection of claim 19 is incorporated. Apte et al. further discloses *retrieving any resources required by the program portion that were identified as a result of querying the interface portion prior to invocation of the first software module* (see at least Figure 3A, item 302, e.g., “queryRegisteredComponents()”; item 308, e.g., “getName()”, “getObject()”; and related discussion in the specification).

Claim 21

The rejection of claim 19 is incorporated. Claim 21 recites the same principle of retrieving resources recited in claim 20, whether it is a program portion or an installation portion of a software module. As a result, this claim is rejection for the same reasons.

Claim 22

The rejection of claim 19 is incorporated. Claim 22 recites the same feature in claim 5; therefore, the same rejection is applied.

Claim 23

The rejection of claim 19 is incorporated. Apte et al. does not specifically disclose *connecting to a remote computer over a telecommunication network and downloading the first software module from the remote computer*. However, Goodisman teaches a network system (see at least Figure 1) of local server computer (host or item 123) and local computer 100 which can send and receive program code to and from the remote server 126 through the local network 122, ISP 124, Internet 125. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the scripting technique in component software architecture of Apte et al. in combination with the network system of Goodisman because this would increase the flexibility of the scripting environment of Apte et al.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action

is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang-Vu "Antony" Nguyen-Ba whose telephone number is (703) 305-0103. The examiner can normally be reached on Tuesday-Friday from 6:15 a.m. – 3:45 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam, can be reached at (703) 305-4552.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9700.

After Final Fax Number	(703) 746-7238
Official Fax Number	(703) 746-7239
Customer Service Center Fax Number	(703) 746-7240
Examiner's Assigned Fax Number	(703) 746-5426



Hoang-Vu "Antony" Nguyen-Ba

July 30, 2003